REMARKS

This reply is filed in response to the office action dated September 1, 2005. Reconsideration of the application and the claims is respectfully requested.

Claim Rejections – 35 U.S.C. §112

Claims 1-8 and 27-37 and 42-49 were rejected under 35 U.S.C. §112, first paragraph. Claims 3, 27, 47 and 48 were rejected under 35 U.S.C. §112, second paragraph. The office action alleges that "at least some" range with respect to the products of the chemical reaction that desorb and leave is not supported by the sepcification as originally filed. Applicants respectfully traverse this rejection. The specification describes on page 7, lines 1-3 and page 23, lines 19-21 that the exhaust products may leave or migrate away. It is implicit in that description that some may leave or some may stay around. Accordingly, applicants believe that "at least some" range is supported fully by the specification.

With respect to "at least some kinetic energy," applicants have amended the term "kinetic" with "vibrational" as suggested in the office action. Applicants, however, contend that the teminologies, kinetic energy and vibraional energy are used interchangeably and therefore, applicants are not giving up any scope of the meaning by this amendment. With respect to "at least some" terminology, applicants respectfully submit that the specification as originally filed fully supports the range as recited. For example, the specification throughout describes transferring vibrational energy in general. In addition, page 4, lines 1-4, page 7, lines 7-12, and page 12, lines 15-18, for example, describe the excitation or vibrational energy transfer with

terminologies such as "a substantial fraction," "a large fraction," "most of the excitation energy." These terminologies fully support the "at least some vibrational energy" claimed in the present application.

With respect to claim 49, the specification on page 22, lines 1-2 describes that "the efficiencies well in excess of 50% can be achieved." 50% is greater than 2%.

For the foregoing reasons, applicants request that the Examiner withdraw all outstanding §112 rejections.

Double Patenting

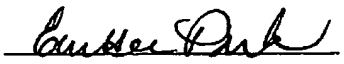
With respect to the double patenting rejection over co-owned U.S. patents, while Applicants do not concede to the propriety of the double patenting rejection in the Office Action, applicants will submit a terminal disclaimer in order to expedite the issuance of the patent when the double patenting rejection is the only remaining rejection.

With respect to the provisional double patenting rejections over the co-pending co-owned applications, since they are provisional, Applicants respectfully request that the Examiner withdraw these rejections when they are the only remaining rejections.

All pending claims are believed to be patentable and a favorable Office Action is hereby earnestly solicited. If a telephone interview would be of assistance in advancing prosecution of the subject application, the Examiner is requested to telephone the number provided below.

Please charge any fee due associated with this reply to Deposit Account No. 02-0393.

Respectfully submitted,



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